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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/016,975	12/12/2001	Eric Rosen	010559	4927
23696 7590 01/25/2007 QUALCOMM INCORPORATED 5775 MOREHOUSE DR. SAN DIEGO, CA 92121			EXAMINER FOX, BRYAN J	
			ART UNIT	PAPER NUMBER
			2617	
SHORTENED STATUTORY PERIOD OF RESPONSE		NOTIFICATION DATE	DELIVERY MODE	
3 MONTHS		01/25/2007	ELECTRONIC	

**Please find below and/or attached an Office communication concerning this application or proceeding.**

If NO period for reply is specified above, the maximum statutory period will apply and will expire 6 MONTHS from the mailing date of this communication.

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us-docketing@qualcomm.com  
kascanla@qualcomm.com  
t\_ssadik@qualcomm.com

**Office Action Summary**

Application No.

10/016,975

Applicant(s)

ROSEN ET AL.

Examiner

Bryan J. Fox

Art Unit

2617

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 03 November 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-70 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-70 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892)          | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)          | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____  | 6) <input type="checkbox"/> Other: _____                          |

## **DETAILED ACTION**

### ***Continued Examination Under 37 CFR 1.114***

A request for continued examination under 37 CFR 1.114 was filed in this application after appeal to the Board of Patent Appeals and Interferences, but prior to a decision on the appeal. Since this application is eligible for continued examination under 37 CFR 1.114 and the fee set forth in 37 CFR 1.17(e) has been timely paid, the appeal has been withdrawn pursuant to 37 CFR 1.114 and prosecution in this application has been reopened pursuant to 37 CFR 1.114. Applicant's submission filed on November 3, 2006 has been entered.

### ***Claim Rejections - 35 USC § 103***

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

The factual inquiries set forth in *Graham v. John Deere Co.*, 383 U.S. 1, 148 USPQ 459 (1966), that are applied for establishing a background for determining obviousness under 35 U.S.C. 103(a) are summarized as follows:

1. Determining the scope and contents of the prior art.
2. Ascertaining the differences between the prior art and the claims at issue.
3. Resolving the level of ordinary skill in the pertinent art.
4. Considering objective evidence present in the application indicating obviousness or nonobviousness.

Claims 1, 3, 7, 9, 13, 14, 18, 20, 24, 26, 30, 31, 35, 37, 41, 43, 47, 48, 52, 53, 58, 60, 64 and 65 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dailey (US006449491B1) in view of Hamalainen (US005966378A).

Regarding **claim 1**, Dailey discloses a system with a terminal 400 that includes a push-to-talk button 460, operatively associated with the controller 470 and used to initiate and conduct group calls (see column 7, lines 26-36). This system notifies the originating party that "wins" the traffic channel (see column 10, lines 8-20. A group call origination message is transmitted from an originating terminal (Block 705) and is received at one of the system transceiver units (see column 8, lines 38-44 and figure 7), which reads on the claimed "receiving a floor-control request from a source communication device for initiating a group call". In response, the system transmits a traffic channel designation message addressed to terminals in the group associated with the group call origination message (see column 8, lines 44-49 and figure 7), which reads on the claimed "initiating a service origination process from the source communication device". After designation of the common traffic channel, a confirm message is transmitted to the terminals of the group (see column 9, lines 47-49 and figure 8), which reads on the claimed "transmitting a response to the floor-control request from a controller after the service origination process is complete," and, configuring a communications manager (CM) to not respond immediately to the floor-control request." Dailey fails to expressly disclose avoiding a race condition between the service origination process and paging.

In a similar field of endeavor, Hamalainen discloses preventing collisions between transmissions in the uplink and in the downlink (see column 3, lines 6-14).

It would have been obvious to a person of ordinary skill in the art at the time of the invention to modify Dailey with Hamalainen to include the above prevention of collisions in order to avoid the loss of data.

Regarding **claim 3**, the combination of Dailey and Hamalainen discloses that the group call origination message is transmitted on a reverse control channel (see Dailey column 3, lines 52-56), which reads on the claimed "the receiving includes receiving the floor-control request on a reverse common channel".

Regarding **claim 7**, Dailey discloses a system with a terminal 400 that includes a push-to-talk button 460, operatively associated with the controller 470 and used to initiate and conduct group calls (see column 7, lines 26-36). This system notifies the originating party that "wins" the traffic channel (see column 10, lines 8-20), which reads on the claimed "method for avoiding simultaneous service origination and paging in a mobile operating in a group communication network". A group call origination message is transmitted from an originating terminal (Block 705) and is received at one of the system transceiver units (see column 8, lines 38-44 and figure 7), which reads on the claimed "receiving a floor-control request from a source communication device for initiating a group call". In response, the system transmits a traffic channel designation message addressed to terminals in the group associated with the group call origination message (see column 8, lines 44-49 and figure 7), which reads on the claimed "initiating a service origination process from the source communication device". After designation

of the common traffic channel, a confirm message is transmitted to the terminals of the group (see column 9, lines 47-49 and figure 8), which reads on the claimed "transmitting a response to the floor-control request from a wireless infrastructure after the service origination process is complete". Dailey fails to expressly disclose avoiding a race condition between the service origination process and paging."

In a similar field of endeavor, Hamalainen discloses preventing collisions between transmissions in the uplink and in the downlink (see column 3, lines 6-14).

It would have been obvious to a person of ordinary skill in the art at the time of the invention to modify Dailey with Hamalainen to include the above prevention of collisions in order to avoid the loss of data.

Regarding **claim 9**, the combination of Dailey and Hamalainen discloses that the group call origination message is transmitted on a reverse control channel (see Dailey column 3, lines 52-56), which reads on the claimed "the receiving includes receiving the floor-control request on a reverse common channel".

Regarding **claim 13**, Dailey discloses a system with a terminal 400 that includes a push-to-talk button 460, operatively associated with the controller 470 and used to initiate and conduct group calls (see column 7, lines 26-36). This system notifies the originating party that "wins" the traffic channel (see column 10, lines 8-20), which reads on the claimed "method for avoiding simultaneous service origination and paging in a mobile operating in a group communication network". A group call origination message is transmitted from an originating terminal (Block 705) and is received at one of the system transceiver units (see column 8, lines 38-44 and figure 7), which reads on the

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claimed "receiving a floor-control request from a source communication device for initiating a group call". In response, the system transmits a traffic channel designation message addressed to terminals in the group associated with the group call origination message (see column 8, lines 44-49 and figure 7), which reads on the claimed "initiating a service origination process from the source communication device". After designation of the common traffic channel, a confirm message is transmitted to the terminals of the group (see column 9, lines 47-49 and figure 8), which reads on the claimed "transmitting a response to the floor-control request". Dailey fails to expressly disclose avoiding a race condition between the service origination process and paging."

In a similar field of endeavor, Hamalainen discloses preventing collisions between transmissions in the uplink and in the downlink (see column 3, lines 6-14).

It would have been obvious to a person of ordinary skill in the art at the time of the invention to modify Dailey with Hamalainen to include the above prevention of collisions in order to avoid the loss of data.

Regarding **claim 14**, the combination of Dailey and Hamalainen discloses that the confirm messages preferably are Fast Associated Control Channel (FACCH) messages (see Dailey column 9, lines 61-65), which reads on the claimed "the transmitting includes transmitting the response on a forward common channel".

Regarding **claim 18**, Dailey discloses a system with a terminal 400 that includes a push-to-talk button 460, operatively associated with the controller 470 and used to initiate and conduct group calls (see Dailey column 7, lines 26-36). This system notifies the originating party that "wins" the traffic channel (see Dailey column 10, lines 8-20),

which reads on the claimed "computer readable medium comprising at least one instruction, which, when executed by a machine, causes the machine to perform operations." A group call origination message is transmitted from an originating terminal (Block 705) and is received at one of the system transceiver units (see column 8, lines 38-44 and figure 7), which reads on the claimed "receive a floor-control request from a source communication device for initiating a group call". In response, the system transmits a traffic channel designation message addressed to terminals in the group associated with the group call origination message (see column 8, lines 44-49 and figure 7), which reads on the claimed "initiate a service origination process for the source communication device". After designation of the common traffic channel, a confirm message is transmitted to the terminals of the group (see column 9, lines 47-49 and figure 8), which reads on the claimed "transmit a response to the floor-control request from a controller after the service origination process is complete". Dailey fails to expressly disclose avoiding a race condition between the service origination process and paging."

In a similar field of endeavor, Hamalainen discloses preventing collisions between transmissions in the uplink and in the downlink (see column 3, lines 6-14).

It would have been obvious to a person of ordinary skill in the art at the time of the invention to modify Dailey with Hamalainen to include the above prevention of collisions in order to avoid the loss of data.

Regarding **claim 20**, the combination of Dailey and Hamalainen discloses that the group call origination message is transmitted on a reverse control channel (see



Dailey column 3, lines 52-56), which reads on the claimed "receive the floor-control request on a reverse common channel".

Regarding **claim 24**, Dailey discloses a system with a terminal 400 that includes a push-to-talk button 460, operatively associated with the controller 470 and used to initiate and conduct group calls (see column 7, lines 26-36). This system notifies the originating party that "wins" the traffic channel (see column 10, lines 8-20), which reads on the claimed "computer-readable medium comprising at least one instruction, which, when executed by a machine, causes the machine to perform operations." A group call origination message is transmitted from an originating terminal (Block 705) and is received at one of the system transceiver units (see column 8, lines 38-44 and figure 7), which reads on the claimed "receive a floor-control request from a source communication device for initiating a group call". In response, the system transmits a traffic channel designation message addressed to terminals in the group associated with the group call origination message (see column 8, lines 44-49 and figure 7), which reads on the claimed "initiate a service origination process for the source communication device". After designation of the common traffic channel, a confirm message is transmitted to the terminals of the group (see column 9, lines 47-49 and figure 8), which reads on the claimed "transmit a response to the floor-control request from a wireless infrastructure after the service origination process is complete". Dailey fails to expressly disclose avoiding a race condition between the service origination process and paging."

In a similar field of endeavor, Hamalainen discloses preventing collisions between transmissions in the uplink and in the downlink (see column 3, lines 6-14).

It would have been obvious to a person of ordinary skill in the art at the time of the invention to modify Dailey with Hamalainen to include the above prevention of collisions in order to avoid the loss of data.

Regarding **claim 26**, the combination of Dailey and Hamalainen discloses that the group call origination message is transmitted on a reverse control channel (see Dailey column 3, lines 52-56), which reads on the claimed "receive the floor-control request on a reverse common channel".

Regarding **claim 30**, Dailey discloses a system with a terminal 400 that includes a push-to-talk button 460, operatively associated with the controller 470 and used to initiate and conduct group calls (see column 7, lines 26-36). This system notifies the originating party that "wins" the traffic channel (see column 10, lines 8-20), which reads on the claimed "computer-readable medium comprising at least one instruction, which, when executed by a machine, causes the machine to perform operations." A group call origination message is transmitted from an originating terminal (Block 705) and is received at one of the system transceiver units (see column 8, lines 38-44 and figure 7), which reads on the claimed "receive a floor-control request from a source communication device for initiating a group call". In response, the system transmits a traffic channel designation message addressed to terminals in the group associated with the group call origination message (see column 8, lines 44-49 and figure 7), which reads on the claimed "initiate a service origination process for the source

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communication device". After designation of the common traffic channel, a confirm message is transmitted to the terminals of the group (see column 9, lines 47-49 and figure 8), which reads on the claimed "transmit a response to the floor-control request". Dailey fails to expressly disclose avoiding a race condition between the service origination process and paging."

In a similar field of endeavor, Hamalainen discloses preventing collisions between transmissions in the uplink and in the downlink (see column 3, lines 6-14).

It would have been obvious to a person of ordinary skill in the art at the time of the invention to modify Dailey with Hamalainen to include the above prevention of collisions in order to avoid the loss of data.

Regarding **claim 31**, the combination of Dailey and Hamalainen discloses that the confirm messages preferably are Fast Associated Control Channel (FACCH) messages (see Dailey column 9, lines 61-65), which reads on the claimed "cache the response on a forward common channel".

Regarding **claim 35**, Dailey discloses a system with a terminal 400 that includes a push-to-talk button 460, operatively associated with the controller 470 and used to initiate and conduct group calls (see column 7, lines 26-36). This system notifies the originating party that "wins" the traffic channel (see column 10, lines 8-20), which reads on the claimed "apparatus for avoiding simultaneous service origination and paging in a mobile operating in a group communication network". A group call origination message is transmitted from an originating terminal (Block 705) and is received at one of the system transceiver units (see column 8, lines 38-44 and figure 7), which reads on the

claimed “means for receiving a floor-control request from a source communication device for initiating a group call”. In response, the system transmits a traffic channel designation message addressed to terminals in the group associated with the group call origination message (see column 8, lines 44-49 and figure 7), which reads on the claimed “means for initiating a service origination process from the source communication device”. After designation of the common traffic channel, a confirm message is transmitted to the terminals of the group (see column 9, lines 47-49 and figure 8), which reads on the claimed “means for transmitting a response to the floor-control request from a controller after the service origination process is complete”. Dailey fails to expressly disclose avoiding a race condition between the service origination process and paging.”

In a similar field of endeavor, Hamalainen discloses preventing collisions between transmissions in the uplink and in the downlink (see column 3, lines 6-14).

It would have been obvious to a person of ordinary skill in the art at the time of the invention to modify Dailey with Hamalainen to include the above prevention of collisions in order to avoid the loss of data.

Regarding **claim 37**, the combination of Dailey and Hamalainen discloses that the group call origination message is transmitted on a reverse control channel (see Dailey column 3, lines 52-56), which reads on the claimed “the receiving includes receiving the floor-control request on a reverse common channel”.

Regarding **claim 41**, Dailey discloses a system with a terminal 400 that includes a push-to-talk button 460, operatively associated with the controller 470 and used to

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initiate and conduct group calls (see column 7, lines 26-36). This system notifies the originating party that “wins” the traffic channel (see column 10, lines 8-20), which reads on the claimed “apparatus for avoiding simultaneous service origination and paging in a mobile operating in a group communication network”. A group call origination message is transmitted from an originating terminal (Block 705) and is received at one of the system transceiver units (see column 8, lines 38-44 and figure 7), which reads on the claimed “means for receiving a floor-control request from a source communication device for initiating a group call”. In response, the system transmits a traffic channel designation message addressed to terminals in the group associated with the group call origination message (see column 8, lines 44-49 and figure 7), which reads on the claimed “means for initiating a service origination process from the source communication device”. After designation of the common traffic channel, a confirm message is transmitted to the terminals of the group (see column 9, lines 47-49 and figure 8), which reads on the claimed “means for transmitting a response to the floor-control request from a wireless infrastructure after the service origination process is complete”. Dailey fails to expressly disclose avoiding a race condition between the service origination process and paging.”

In a similar field of endeavor, Hamalainen discloses preventing collisions between transmissions in the uplink and in the downlink (see column 3, lines 6-14).

It would have been obvious to a person of ordinary skill in the art at the time of the invention to modify Dailey with Hamalainen to include the above prevention of collisions in order to avoid the loss of data.

Regarding **claim 43**, the combination of Dailey and Hamalainen discloses that the group call origination message is transmitted on a reverse control channel (see Dailey column 3, lines 52-56), which reads on the claimed “the receiving includes receiving the floor-control request on a reverse common channel”.

Regarding **claim 47**, Dailey discloses a system with a terminal 400 that includes a push-to-talk button 460, operatively associated with the controller 470 and used to initiate and conduct group calls (see column 7, lines 26-36). This system notifies the originating party that “wins” the traffic channel (see column 10, lines 8-20), which reads on the claimed “apparatus for avoiding simultaneous service origination and paging in a mobile operating in a group communication network”. A group call origination message is transmitted from an originating terminal (Block 705) and is received at one of the system transceiver units (see column 8, lines 38-44 and figure 7), which reads on the claimed “means for receiving a floor-control request from a source communication device for initiating a group call”. In response, the system transmits a traffic channel designation message addressed to terminals in the group associated with the group call origination message (see column 8, lines 44-49 and figure 7), which reads on the claimed “means for initiating a service origination process from the source communication device”. After designation of the common traffic channel, a confirm message is transmitted to the terminals of the group (see column 9, lines 47-49 and figure 8), which reads on the claimed “means for transmitting a response to the floor-control request”. Dailey fails to expressly disclose avoiding a race condition between the service origination process and paging.”

In a similar field of endeavor, Hamalainen discloses preventing collisions between transmissions in the uplink and in the downlink (see column 3, lines 6-14).

It would have been obvious to a person of ordinary skill in the art at the time of the invention to modify Dailey with Hamalainen to include the above prevention of collisions in order to avoid the loss of data.

Regarding **claim 48**, the combination of Dailey and Hamalainen discloses that the confirm messages preferably are Fast Associated Control Channel (FACCH) messages (see Dailey column 9, lines 61-65), which reads on the claimed “the transmitting includes transmitting the response on a forward common channel”.

Regarding **claim 52**, Dailey discloses a system with a terminal 400 that includes a push-to-talk button 460, operatively associated with the controller 470 and used to initiate and conduct group calls (see column 7, lines 26-36). This system notifies the originating party that “wins” the traffic channel (see column 10, lines 8-20), which reads on the claimed “apparatus for avoiding simultaneous service origination and paging in a mobile operating in a group communication network”. A group call origination message is transmitted from an originating terminal (Block 705) and is received at one of the system transceiver units (see column 8, lines 38-44 and figure 7), which reads on the claimed “receiving a floor-control request from a source communication device for initiating a group call”. In response, the system transmits a traffic channel designation message addressed to terminals in the group associated with the group call origination message (see column 8, lines 44-49 and figure 7), which reads on the claimed “initiating a service origination process from the source communication device”. After designation

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of the common traffic channel, a confirm message is transmitted to the terminals of the group (see column 9, lines 47-49 and figure 8), which reads on the claimed "transmitting a response to the floor-control request from a controller after the service origination process is complete". Since the system both receives the origination message and transmits the response as discussed above, the system must include a transmitter and a receiver as claimed. Further, the transceiver that has the transmitter and receiver is connected to a cellular radio exchange 614 and a mobility server 616 (see figure 6), and these devices together produce a machine such that the instructions which execute on the computer or other programmable data processing apparatus create means for implementing the functions specified in the flowchart block or blocks (see column 8, lines 7-28), so they must include the "processor communicatively coupled to the receiver and the transmitter" capable of the functions described above. Dailey fails to expressly disclose avoiding a race condition between the service origination process and paging."

In a similar field of endeavor, Hamalainen discloses preventing collisions between transmissions in the uplink and in the downlink (see column 3, lines 6-14).

It would have been obvious to a person of ordinary skill in the art at the time of the invention to modify Dailey with Hamalainen to include the above prevention of collisions in order to avoid the loss of data.

Regarding **claim 53**, the combination of Dailey and Hamalainen discloses that the group call origination message is transmitted on a reverse control channel (see



Dailey column 3, lines 52-56), which reads on the claimed “the receiving includes receiving the floor-control request on a reverse common channel”.

Regarding **claim 58**, Dailey discloses a system with a terminal 400 that includes a push-to-talk button 460, operatively associated with the controller 470 and used to initiate and conduct group calls (see column 7, lines 26-36). This system notifies the originating party that “wins” the traffic channel (see column 10, lines 8-20), which reads on the claimed “apparatus for avoiding simultaneous service origination and paging in a mobile operating in a group communication network”. A group call origination message is transmitted from an originating terminal (Block 705) and is received at one of the system transceiver units (see column 8, lines 38-44 and figure 7), which reads on the claimed “receiving a floor-control request from a source communication device for initiating a group call”. In response, the system transmits a traffic channel designation message addressed to terminals in the group associated with the group call origination message (see column 8, lines 44-49 and figure 7), which reads on the claimed “initiating a service origination process from the source communication device”. After designation of the common traffic channel, a confirm message is transmitted to the terminals of the group (see column 9, lines 47-49 and figure 8), which reads on the claimed “transmitting a response to the floor-control request from a wireless infrastructure after the service origination process is complete”. Since the system both receives the origination message and transmits the response as discussed above, the system must include a transmitter and a receiver as claimed. Further, the transceiver that has the transmitter and receiver is connected to a cellular radio exchange 614 and a mobility server 616

(see figure 6), and these devices together produce a machine such that the instructions which execute on the computer or other programmable data processing apparatus create means for implementing the functions specified in the flowchart block or blocks (see column 8, lines 7-28), so they must include the "processor communicatively coupled to the receiver and the transmitter" capable of the functions described above. Dailey fails to expressly disclose avoiding a race condition between the service origination process and paging."

In a similar field of endeavor, Hamalainen discloses preventing collisions between transmissions in the uplink and in the downlink (see column 3, lines 6-14).

It would have been obvious to a person of ordinary skill in the art at the time of the invention to modify Dailey with Hamalainen to include the above prevention of collisions in order to avoid the loss of data.

Regarding **claim 60**, the combination of Dailey and Hamalainen discloses that the group call origination message is transmitted on a reverse control channel (see Dailey column 3, lines 52-56), which reads on the claimed "the receiving includes receiving the floor-control request on a reverse common channel".

Regarding **claim 64**, Dailey discloses a system with a terminal 400 that includes a push-to-talk button 460, operatively associated with the controller 470 and used to initiate and conduct group calls (see column 7, lines 26-36). This system notifies the originating party that "wins" the traffic channel (see column 10, lines 8-20), which reads on the claimed "apparatus for avoiding simultaneous service origination and paging in a mobile operating in a group communication network". A group call origination message

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is transmitted from an originating terminal (Block 705) and is received at one of the system transceiver units (see column 8, lines 38-44 and figure 7), which reads on the claimed "receiving a floor-control request from a source communication device for initiating a group call". In response, the system transmits a traffic channel designation message addressed to terminals in the group associated with the group call origination message (see column 8, lines 44-49 and figure 7), which reads on the claimed "initiating a service origination process from the source communication device". After designation of the common traffic channel, a confirm message is transmitted to the terminals of the group (see column 9, lines 47-49 and figure 8), which reads on the claimed "transmitting a response to the floor-control request". Since the system both receives the origination message and transmits the response as discussed above, the system must include a transmitter and a receiver as claimed. Further, the transceiver that has the transmitter and receiver is connected to a cellular radio exchange 614 and a mobility server 616 (see figure 6), and these devices together produce a machine such that the instructions which execute on the computer or other programmable data processing apparatus create means for implementing the functions specified in the flowchart block or blocks (see column 8, lines 7-28), so they must include the "processor communicatively coupled to the receiver and the transmitter" capable of the functions described above. Dailey fails to expressly disclose avoiding a race condition between the service origination process and paging."

In a similar field of endeavor, Hamalainen discloses preventing collisions between transmissions in the uplink and in the downlink (see column 3, lines 6-14).

It would have been obvious to a person of ordinary skill in the art at the time of the invention to modify Dailey with Hamalainen to include the above prevention of collisions in order to avoid the loss of data.

Regarding **claim 65**, the combination of Dailey and Hamalainen discloses that the confirm messages preferably are Fast Associated Control Channel (FACCH) messages (see Dailey column 9, lines 61-65), which reads on the claimed "the transmitting includes transmitting the response on a forward common channel".

Regarding **claim 70**, Dailey discloses a system with a terminal 400 that includes a push-to-talk button 460, operatively associated with the controller 470 and used to initiate and conduct group calls (see column 7, lines 26-36). This system notifies the originating party that "wins" the traffic channel (see column 10, lines 8-20. A group call origination message is transmitted from an originating terminal (Block 705) and is received at one of the system transceiver units (see column 8, lines 38-44 and figure 7), which reads on the claimed "receiving a floor-control request from a source communication device for initiating a group call," and, "coordinating operation of a packet data serving node which receives a CM initiated response and a mobile switching center which responds to a talker's service origination request." In response, the system transmits a traffic channel designation message addressed to terminals in the group associated with the group call origination message (see column 8, lines 44-49 and figure 7), which reads on the claimed "initiating a service origination process from the source communication device". After designation of the common traffic channel, a confirm message is transmitted to the terminals of the group (see column 9, lines 47-49

and figure 8), which reads on the claimed "transmitting a response to the floor-control request from a controller after the service origination process is complete," and, "not issuing a service origination request until after a talker mobile station has received a response to the floor-control request." Dailey fails to expressly disclose avoiding a race condition between the service origination process and paging.

In a similar field of endeavor, Hamalainen discloses preventing collisions between transmissions in the uplink and in the downlink (see column 3, lines 6-14).

It would have been obvious to a person of ordinary skill in the art at the time of the invention to modify Dailey with Hamalainen to include the above prevention of collisions in order to avoid the loss of data.

Claims 2, 8, 19, 25, 36, 42, 53 and 59 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dailey in view of Hamalainen as applied to claims 1, 7, 18, 24, 35, 41, 52 and 58 above, and further in view of Phillips et al (US005873023A).

Regarding **claims 2, 8, 19, 25, 36, 42, 53 and 59**, the combination of Dailey and Hamalainen fails to expressly disclose caching the response before sending it.

In a similar field of endeavor, Phillips et al discloses a method for implementing a group call where messages may be queued before transmission (see column 5, lines 10-33). The queuing of a message reads on the claimed "caching".

It would have been obvious to a person of ordinary skill in the art at the time of the invention to modify the combination of Dailey and Hamalainen with Phillips et al to

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include the above queuing of messages in order to avoid loss of information in the case that more than one message is to be sent at the same time or nearly the same time.

Claims 4, 5, 10, 11, 16, 21, 22, 27, 28, 33, 38, 39, 44, 45, 50, 55, 56, 61, 62 and 67 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dailey in view of Hamalainen as applied to claims 3, 9, 14, 20, 26, 31, 37, 43, 48, 54, 60 and 65 above, and further in view of Kumar et al (US006507572B1).

Regarding **claims 4, 10, 21, 27, 38, 44, 55 and 61**, the combination of Dailey and Hamalainen discloses that the group call origination message is transmitted on a reverse control channel (see Dailey column 3, lines 52-56). The combination of Dailey and Hamalainen fails to expressly disclose the use of the reverse access channel.

In a similar field of endeavor, Kumar et al discloses a system where a mobile makes an access on the RACH at the primary to request channel assignment (see column 16, lines 56-65).

It would have been obvious to a person of ordinary skill in the art at the time of the invention to modify the combination of Dailey and Hamalainen with Kumar et al to include the above use of the RACH in order to be consistent with the standard of using the reverse channel for initial contact.

Regarding **claims 5, 11, 22, 28, 39, 45, 56 and 62**, the combination of Dailey and Hamalainen discloses that the group call origination message is transmitted on a reverse control channel (see Dailey column 3, lines 52-56). The combination of Dailey

and Hamalainen fails to expressly disclose the use of the reverse enhanced access channel.

In a similar field of endeavor, Kumar et al discloses a system where a mobile uses the R\_EACH to request assignment of a dedicated traffic channel (see column 18, lines 8-10).

It would have been obvious to a person of ordinary skill in the art at the time of the invention to modify the combination of Dailey and Hamalainen with Kumar et al to include the above use of the reverse enhanced access channel in order to be consistent with the standard of using the reverse enhanced access channel to request assignment of a dedicated traffic channel.

Regarding **claims 16, 33, 50 and 67**, the combination of Dailey and Hamalainen discloses that the confirm messages preferably are Fast Associated Control Channel (FACCH) messages (see Dailey column 9, lines 61-65). The combination of Dailey and Hamalainen fails to expressly disclose that the forward common control channel is used.

In a similar field of endeavor, Kumar et al discloses a system where a primary responds on the forward common control channel (see column 16, lines 27-49).

It would have been obvious to a person of ordinary skill in the art at the time of the invention to modify the combination of Dailey and Hamalainen with Kumar et al to include the above use of the forward common control channel in order to take advantage of the benefits of a common channel, such as resource sharing between many terminals.

Claims 6, 12, 23, 29, 40, 46, 51, 57, 63, 68 and 69 rejected under 35 U.S.C. 103(a) as being unpatentable over Dailey in view of Hamalainen as applied to claims 3, 9, 20, 26, 37, 43, 48, 54, 60 and 65 above, and further in view of Wang et al (US 20020055364A1).

Regarding **claims 6, 12, 23, 29, 40, 46, 51, 57, 63 and 68**, the combination of Dailey and Hamalainen discloses that the group call origination message has a special abbreviated format (see Dailey column 3, lines 52-56). The combination of Dailey and Hamalainen fails to expressly disclose that the message is in short data burst form.

In a similar field of endeavor, Wang et al discloses a system that uses a short data burst (see figure 2).

It would have been obvious to a person of ordinary skill in the art at the time of the invention to modify the combination of Dailey and Hamalainen with Wang et al to include the above short data burst form in order to minimize the use of system resources by avoiding the need for a longer message.

Regarding **claim 69**, the combination of Dailey, Hamalainen and Wang et al discloses that the terminal 400 includes a push-to-talk button 460 (see Dailey column 7, lines 26-36), which reads on the claimed "the source communication device includes a push-to-talk (PTT) device".



Claims 15, 32, 49 and 66 are rejected under 35 U.S.C. 103(a) as being unpatentable over Dailey in view of Hamalainen as applied to claims 14, 31, 48 and 65 above, and further in view of Hunzinger (US 20020082032A1).

Regarding **claims 15, 32, 49 and 66**, the combination of Dailey and Hamalainen discloses that the confirm messages preferably are Fast Associated Control Channel (FACCH) messages (see Dailey column 9, lines 61-65). The combination of Dailey and Hamalainen fails to disclose that the response is transmitted on a forward paging channel.

In a similar field of endeavor, Hunzinger discloses a system where an acknowledgement is received on the forward paging channel (see paragraph 20).

It would have been obvious to a person of ordinary skill in the art at the time of the invention to modify the combination of Dailey and Hamalainen with Hunzinger to include the above use of the forward paging channel in order to take advantage of the benefits of a paging channel such as avoiding the need for a dedicated channel, conserving system resources.

### ***Response to Arguments***

Applicant's arguments filed November 3, 2006 have been fully considered but they are not persuasive.

The Applicant argues the combination of Dailey and Hamalainen fails to disclose initiating a service origination process from the source communication device. The Examiner respectfully disagrees. Dailey discloses a group call origination message is transmitted from an originating terminal (Block 705) and is received at one of the system

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transceiver units (see column 8, lines 38-44 and figure 7). In response, the system transmits a traffic channel designation message addressed to terminals in the group associated with the group call origination message (see column 8, lines 44-49 and figure 7), which reads on the broadest reasonable interpretation in light of the specification of "initiating a service origination process from the source communication device.

The Applicant argues the term collision is different from the race condition. The Examiner contends the collision reads on the broadest reasonable interpretation in light of the specification of "race condition."

### ***Conclusion***

The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Ravishankar et al (US006650895B1) disclose in-call DTMF transport for geostationary mobile satellite communication system.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Bryan J. Fox whose telephone number is (571) 272-7908. The examiner can normally be reached on Monday through Friday 9am - 5pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Charles N. Appiah can be reached on (571) 272-7904. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Bryan Fox  
January 19, 2007

A handwritten signature in black ink, appearing to read 'Charles Appiah', with a stylized flourish at the end.

CHARLES APPIAH  
PRIMARY EXAMINER